Elementary Energy Lesson –
TWENTY QUESTIONS SCAVENGER HUNT

DIRECTIONS: Go to the U.S. Energy Information Administration's Energy Kids website (http://www.eia.doe.gov/kids/) to find the answers to these 20 questions. Read the "Forms of Energy?" page in the "What is Energy?" section to answer question #1. Then go back to the homepage and look under "Energy Sources" to find the answers to questions #2-20.

1. What is energy?

2. What are the 5 main types of renewable energy? Why are these types of energy considered renewable?

3. What are the 4 main types of nonrenewable energy? Why are these types of energy considered nonrenewable?

4. Name 4 fossil fuels. Why are they called "fossil"?

Courtesy of Mary Taft, Soule Road School, Wilbraham, MA

5. What is photovoltaic energy? How does a photovoltaic (PV) cell work?

6. What is the most common form of renewable energy used to generate electricity? What percentage of U.S. electricity generation comes from this source?

7. Hydroelectric energy can be generated through a run-of-the-river system and through a storage system. Describe each system.

Run-of-the-river system:

Storage system:

8. What causes wind? How does the process reverse itself between day and night?

9. How does a windmill work?

10. How do engineers use the earth's heat to create geothermal energy?

11. Biomass involves burning organic materials to release chemical energy. What are the steps in the Carbon Cycle that describe this process?

12. How did petroleum and natural gas form?

13. What is "crude oil" and how is it brought to the surface of the earth?

14. What are 10 different petroleum products that come from "crude oil"?

1. 6.
2. 7.
3. 8.
4. 9.
5. 10.

15. How did coal form?

16. Name and describe 4 major uses for coal.

1.

2

3.

4.

17. In terms of percentages, what are the 3 biggest uses of natural gas?

1.

2.

3.

18. What is the fuel for nuclear power plants, and where does it come from?

19. Nuclear energy is considered a non-renewable energy, but it is not a fossil fuel. What is it? [HINT: this question is not answered directly. You must INFER what type of material it is, given your knowledge of geology, from the information that is given. *THINK!*]

20. In terms of safety and the environment, what is one positive thing and one negative thing about nuclear power plants?